

# **KISCOTE PR** High Performance HDPE Preformed Membrane for Upwards Bonding

### DESCRIPTION

KISCOTE PR is a High-Performance HDPE preformed membrane for upwards bonding designed for underground structures pits and other similar area. Its advanced technology sets it apart from other preformed membranes: A composite sheet comprising a thick HDPE film and an adhesive that will react with wet mortar and gives an excellent bond to the structure. It is a fully bonded waterproofing membrane that bonds directly to concrete, thus sealing the concrete and preventing any ingress of water around the structure, even in some cases of severe soil sedimentation. KISCOTE PR does not require protection before backfilling in turn promoting productivity and efficiency.

#### **RECOMMENDED USE**

- Basement walls
- For use below slab (such as ground or basement)
- Tunnel walls and subway walls

#### **ADVANTAGES**

- High dimensional stability, puncture and tear resistance
- Highly reactive adhesive that ensure full and high adhesion to concrete surface
- Complies to LTA specifications
- No protection required before back filling. High impact resistant to withstand force from pouring concrete and water-jet during cleaning
- Can be used as a barrier to gas, water and moisture
- Versatile in area of uses and suitable for different soil conditions
- Weather and UV resistant
- Strong resistant to industrial chemicals
- Can be installed on slightly damp surfaces

#### **PACKAGING**

KISCOTE PR is supplied in 36m<sup>2</sup> per roll

KISCOTE PR is supplied in 1.2mm thickness.

#### **APPLICATION GUIDELINES**

#### a) <u>Surface Preparation</u>

Receiving substrates must be of acceptable smoothness and does not have big cracks or voids above 12mm.

b) Application

KISCOTE PR should not be used when climatic temperature below -2°C. In condition of when temperature is low, the tape adhesive must be heated slightly, with the means of a hot air gun during preparation to improve initial adhesion.

REV. TDS-PR-V4 Dated: 03-Oct-2021 KENSETSU INTERNATIONAL (S) PTE LTD

### DATA SPECIFICATION SHEET



#### i. Vertical Substrates

- Lay membrane to area required, crop to fit when necessary. Carefully remove release paper material with this liner side facing the concrete pour. Press membrane downwards using suitable tools to create pressured bonding to substrate.
- To improve adhesion, fixings by mechanical parts and specially-designed parts can be used at the selvedge. Fixing areas must be specially protected by over-laid layers of KISCOTE PR.
- ii. Roller Ends and Cuts Edges
- Overlap all roll ends and cut edges by a minimum 75 mm. Use KISCOTE PR TAPES to adhere overlapped areas of 2 membranes.

#### iii. Exposure and Protection

• KISCOTE PR can be exposed to weather; however, effort should be taken to prevent damage by other trades. Any punctured or damaged areas should be repaired with a layer of KISCOTE PR membrane with minimum 50mm laps joint. Damage area can also be repaired by liquid applied KISCOTE PR SEAL or KISCOTE FP.

#### **STORAGE**

KISCOTE PR should be stored at room temperature, kept dry and out of direct sunlight. If these conditions are maintained and the product packaging is unopened, a 12-month shelf life can be expected from date of manufacturing.

KISCOTE PR must be stacked or stored in a manner to prevent damages from the weight of another roll or other materials.

#### **HEALTH & SAFETY**

Refer to SDS for further information.



#### **TECHNICAL PROPERTIES**

KISCOTE PR	
Appearance	Off white HDPE
	Membrane
Membrane thickness (DIN 53353)	1.2mm
Dimensional stability (SS 374)	
Chemical	< 0.1%
Immersion	< 0.1%
Tensile strength (SS 374)	
Normal curing	> 25MPa
Thermal aging	> 25Mpa
	Ĩ
Elongation (SS 374)	
Normal curing	a) > 900%
Thermal aging	b) >850%
Peel or stripping strength to concrete (ASTM D903)	> 4000 N/m
Resistance to hydrostatic pressure (DIN 16726)	> 50m water head
Resistance to Puncture (ASTM E154)	>1000 N
Change in properties after storage in aqueous solution	
(DIN 16726)	
	) 100/
a) Thickness	a) < 10%
b) Tensile strength	b) < 10%
c) Elongation at break	c) $< 10\%$
d) Peel or stripping strength to concrete	d) < 10% e) < 10%
<ul><li>e) Resistance to hydrostatic head</li><li>f) Puncture resistance</li></ul>	f) < 10%
I) Functure resistance	1) < 10%
Pliability (ASTM D146:04 (2012)e1)	No failure
Resistance to leakage at joint	No leakage
(UEATC M.O.A.T. No.27 (SS374:1994, appendix H)	0
Impact strength (Perforation test)	No puncture
(DIN 16726:1986)	*
Tensile shear at joint	>350N
(UEATC M.O.A.T. No.27 (SS374:1994, appendix C)	
Tear resistance (DIN 53363:2003-10)	
Longitudinal	a) > 150N/mm
Transverse	b) > 140N/mm
Water absorption at 28 days (ASTM D570: 98(2005)e1)	< 1.0%
Water vapour transmission (ASTM E96/E96M:16)	< 0.1 g/m <sup>2</sup> /day

#### **IMPORTANT NOTES**

Any information and/or specification contained herein is to the best of the company knowledge, true and accurate, it is always recommended that trial to be carried out to confirm suitability of use for all products, as no warranty is given or implied in connection with any recommendations and/or suggestions made by the company representatives, agents and/or distributors.

All information contained in this document is effective from date shown and supersedes all previous version. Please check with your local KENSETSU office to confirm that this is up to date version.

REV. TDS-PR-V4 Dated: 03-Oct-2021 KENSETSU INTERNATIONAL (S) PTE LTD

## DATA SPECIFICATION SHEET